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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/434,498	11/05/1999	MUNEHIRO DATE	ASAIN0058	4034

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EXAMINER

HESS, BRUCE H

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 09/10/2004

26

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/434,498

Applicant(s)

DATE ET AL.

Examiner

Bruce H Hess

Art Unit

1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 3, 4 and 6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3 and 4 is/are allowed.
- 6) ☒ Claim(s) 6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

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1. Upon reconsideration, the allowance of claim 6 is withdrawn for the reasons set forth below. Claims 3 and 4 remain allowed.

2. Claim 6 is rejected under 35 USC 112 (second paragraph) as being indefinite.

In particular, the claim recites a "second portion" (emphasis added) without reciting a "first portion" and recites "at a relatively faster rate" without reciting a slower rate for comparison. It appears that applicants have inadvertently omitted the step of "selectively cooling a first portion of the paper at a relatively slower rate to produce an uncolored portion" (see the amendment of June 20, 2001). Recitation of the aforementioned phrase would overcome this rejection.

3. The following rejection is predicated upon the assumption that claim 6 should recite the omitted sentence discussed in the preceding paragraph.

Claim 6 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one of ordinary skill in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. In particular, the recitations "selectively cooling a first portion of the paper at a relatively slower rate to produce an uncolored portion" and "selectively cooling a second portion of the paper at a relatively faster rate to produce a colored portion" constitute new matter. Applicants' assertion to the contrary, the disclosure at page 16, lines 18-23 of the specification fails to support the subject matter of claim 6.

4. The patent to Shibahashi et al. (GB 2135466A) is cited to show the state of the art of reversible heat-sensitive paper.

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Example 2 teaches two cooling steps (see page 6, lines 26-28). In the first cooling step, the entire sheet is cooled at a slow rate. In the second cooling step, images are formed at a relatively faster rate with a cold pen. This patent has not been applied against the claims since the examiner is interpreting "selectively" to mean in a non-uniform manner and the "first portion" and the "second portion" to be distinct areas which are both less than the whole area.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruce Hess whose telephone number is (571) 272-1525. The examiner can normally be reached on Monday to Friday 9 Am to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (703) 308-0449. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

B. Hess/af  
April 22, 2004



BRUCE H. HESS  
PRIMARY EXAMINER